

## ANNUAL MEETING.

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JANUARY 25, 1888.

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Professor W. J. Stephens, F.G.S., in the Chair.

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### PRESIDENT'S ADDRESS.

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THE historians of Australia, whoever from time to time may claim or deserve the title, will always refer to the year which has now closed as an epoch in their records. To our own eyes indeed it may for the moment wear a different complexion. Our attention is distracted from the real significance of the period by a multiplicity of fantastic and ridiculous schemes for celebrating an occasion so suggestive of ironical felicitations. And though I write these words before the actual completion of the century, and therefore rather with dismal forebodings than with the still more depressing experience of the festivities and jubilations which are already resounding in our ears, and threatening a period of universal indigestion and despondency, I cannot pretend to think our mode of celebration very sensible or very dignified. Those are empty (though doubtless sincere) compliments that are paid to "our noble selves."

And a philosopher may without difficulty demonstrate that a date is not a stage, that there is no beginning and no end to a period, that growth is imperceptible and not marked by astronomical measures, and so forth. But after all there is a great deal of human nature in the philosopher, who is found to keep Birthdays and Wedding days and New Year's Days ; yes, and bank holidays, even though they fall on dates of so uncertain a character as Good

Friday and Christmas Day. So let us as philosophers, but nevertheless also as units of humanity (which is the more important) join with the unphilosophic in their unreasonable but natural rejoicings. Yet we must observe that our Society through all the turmoil steers an undeviating course. This meeting is held precisely as if there were no other gatherings to compete with it in attraction, just as a certain proportion of the necessary order of life must be maintained throughout the gayest festivities of fashion.

This day one hundred years ago, the first Governor of New South Wales sailed in the *Supply* from Botany Bay, with a detachment of marines, to occupy ground for the settlement of the infant colony on the shores of Port Jackson, a harbour which had been discovered on the 21st by a boat party, fitted out to explore Broken Bay in the hopes of discovering a more favourable site than could be obtained near Point Sutherland, the Botany Bay rendezvous. On the 24th the French exploring ships, *Boussole* and *Astrolabe*, had appeared off the mouth of the Bay, but were unable to enter owing to a strong westerly gale until after the departure of the *Supply*. Of these ships and their gallant crews no direct news was ever obtained after their departure from our shores, M. de Lesseps bringing the latest intelligence to Europe by way of Kamschatka.

This coincidence in arrival of French and English ships upon an almost unknown spot at the antipodes of European civilisation is a singular introduction to our brief but extraordinary history.

The point however to which I would draw your special attention for one moment is the extraordinary courage or audacity which led the British Government to establish this outpost at the Antipodes. The whole western coast of America was Spanish. The Aleutian Islands, Kamschatka and Okhotsk, were Russian. Japan, China, and Austral India were hardly counted as units under the solidarity of nations. The Philippines belonged to Spain; Java and Ceylon to the Netherlands. The Indian trade was under a vexatious monopoly, against which the merchants of Sydney contended

for many years, though with ultimate success. The Mascarene Archipelago was in the hands of the French, the Cape of Good Hope of the Dutch. A more isolated position can hardly be imagined than that of Sydney; and during the early years of this colony the consequences of this isolation were severely felt. And a more trying and responsible office can hardly be conceived than that of the first governor, a man of extraordinary fertility of design and unparalleled resolution. It is commonly, whether from ignorance or malignity, asserted that the British, no longer able to transport their criminals into enforced servitude in the American colonies, selected this extremity of the habitable globe as a convenient spot for disposal of refuse. But those who have taken the trouble to ascertain the facts, know that it was philanthropy, and not mere selfishness, that dictated the course then pursued. The first impulse however, which may be studied in the inaugural speech of Governor Phillip, whether altogether authentic or not, was almost lost sight of in the brutalising distractions of the tremendous war in which Britain was soon engaged; and there is much in this part of our history which no Australian can regard with complacency.

It may serve as a help to the memory to note that the trial of Warren Hastings took place, and the malady of King George III. was declared during this year; Lord George Gordon was imprisoned for the Anti-popey Riots; the Young Pretender died at Rome; the last Assembly of the Notables, "the last terrestrial Notables, not to reappear any other time in the History of the World," came to an end, and George Washington had not yet been elected First President of the United States of America. The whole world was, as it were, in labour for the terrible convulsions which were now upon the point of development. And I suppose that seldom, if ever, have the domestic politics of Britain been in worse case than they were then.

Yet this moment, while the thunders of the storm were already muttering, and the foundations of the whole structure of society

were beginning to heave and rend, was chosen for the inauguration of a Greater Britain at the Antipodes. Such boldness of conception, such defiance of illfortune, such stubborn perseverance have justly earned the prosperity which we now celebrate.

This Society has lost during the last year seven members removed in the course of nature, whose names I here record.

Edwin Daintrey, who died last October, was a gentleman of highly cultivated literary tastes, at one time Honorary Secretary to the Australian Library in Bent-street. He was an excellent Botanist, and took a lively interest in all branches of Natural History.

Dr. Markey, L.R.C.S.J., &c., arrived in the Colony in 1865, and practised successfully in Maitland, Casino, and Sydney, where he was also Resident Surgeon of the Infirmary for more than two years.

Mr. W. J. Weston died June 4, 1887.

Mr. F. Tenison-Woods, who died June 1887, after being engaged for many years in the Customs Department, Sydney, gave, until his health broke down, valuable services to the Society and to the cause of science in general. His position naturally supplied constant opportunities for picking up the 'curios' which are so often lost or dispersed after their arrival in Sydney, and of these he made good use.

Mr. Patrick Hayes died December, 1887.

The Hon. W. Busby, M.L.A., was a colonist of very long experience. He assisted his father in his excavations for "Busby's Bore," commenced in 1827, for the purpose of supplying water to Sydney from the Botany Swamps, and was, strange as it sounds to us, sent to Norfolk Island, at that time the inner jail of Botany Bay, to prosecute his education under better teaching than could then be obtained in Sydney. His reminiscences of old times were, as may well be imagined, both curious and interesting.



Spencer Fullerton Baird, born in Pennsylvania, 1823, Secretary to the Smithsonian Institution at Washington, and author of many works upon the Zoology of North America, was appointed (1871) United States Commissioner of Fish and Fisheries, for the purpose of inquiring into the causes of the decrease of the food fishes of the United States, and the methods of restoring them. In this capacity, as in others, his labours were of great service not only to America, but to the whole civilised world. He was elected an Honorary Member of this Society January, 1883, and deceased August 19th, 1887.

H. R. Labatt, a younger son of the late well-known Dr. Labatt, of Dublin, arrived in the colony about 1839. He was engaged in the survey of Manero, New England, and Maryborough, and was for some time in charge of the roads in the County of Cumberland. After this he acted as manager of Gragins Station, the property of Messrs. Cheke and Broadhurst, but subsequently returned to the public service in the Harbours and Rivers Department. He was a gentleman of a singularly simple, straightforward, and honourable character, and esteemed in the highest degree by all who had the pleasure of his acquaintance. He died near Campbelltown in July last.

Thirteen years have now elapsed—*fugaces labuntur*!—since the foundation of the Linnean Society of New South Wales, and twelve portly volumes now testify to its growth and vitality. Of the last volume, I propose as on previous occasions to give a brief account in systematic divisions, specifying only such details as I think are worth the pointing out to experts in similar matters. To each division I have appended a reference to papers upon the same or allied subjects which have appeared in the various scientific periodicals of Australia and New Zealand, so far as we possess them in our Library. In my last address, I was from the nature of the case obliged to confine these references to the Volumes for 1885; but am now enabled in some instances to extend them to a

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later date. A few references to European publications have also been added.

The Library of the Society has been increased, as usual, by exchanges and donations of very considerable value. Among the donations the following seem to deserve particular mention; the Hon. William Macleay has presented large collections of scientific periodicals and of other works, especially upon Ichthyology and Fish Culture, Ornithology and other branches of Natural History; we have also received important contributions to the Library from Baron v. Müller, Dr. Cox, Dr. Ramsay, Mr. Ratte, Dr. Katz, Mr. G. A. Tucker, Dr. Dixon, Mr. Sangster, Mr. H. C. Russell, Rev. J. E. Tenison-Woods; also from the Governments of New South Wales, Victoria, South Australia, Queensland, and Tasmania; as well as from the various Societies with which we are in correspondence, amounting altogether to a very considerable mass of scientific literature.

#### ZOOLOGY.

##### MAMMALS.

Mr. K. H. Bennett gives an account of the Invasion of the West of N.S.W. by *Mus Tompsonii* (p. 447). Dr. Ramsay describes *Perameles auratus*, n.sp., *Antechinus Froggatti*, n.sp., and *Mus Burtoni*, n.sp., all from Derby, N.W.A.

Proc. Roy. Soc. Qld. Vol. III.—On a new species of *Dendrolagus*, C. W. de Vis, M.A. (p. 11).

On *Pseudochirus Forsteri*, n.sp., a Phalanger from N.G., Ann. and Mag. XIX., 1887, (p. 146), and on *Nesonycteris Woodfordi*, n.sp., and *Pteropus grandis*, n.sp., from the Solomon Islands, P.Z.S., 1887, p. 320. By Oldfield Thomas, and on *Peragale leucura*, n.sp., ib. XIX. (p. 397).

##### BIRDS.

Mr. K. H. Bennett describes the Nidification of *Pachycephala*, sp. (p. 103). See also note by R. D. Fitzgerald, Junr., p. 970.

Dr. Ramsay contributes a list of Birds collected in N.W.A. by the late Mr. T. H. Boyer-Bower (p. 165), describes *Philemon occidentalis*, n.sp. (p. 676), *Gerygone Thorpei*, n.sp. (p. 677), Eggs of three sp. of sea birds (p. 678), *Epimachus Macleayanae*, n.sp. from N.G. (p. 239). Mr. A. J. North gives notes on Australian Oology (pp. 405, 554), and Dr. Haswell an elaborate memoir on the early stages in the development of *Dromæus Novæ Hollandiæ*, with abundant illustrations (p. 576).

Proc. R. S. Tasm. 1886.—Systematic list of Tasmanian Birds. Collected by Col. W. V. Legge, F.L.S. (p. 237). Note on the genus *Ephthianura* (p. 247).

Roy. Soc. Vic. XXIV.—On production of colour in Birds Eggs. A. H. Lucas, M.A. (p. 52).

Proc. R. S. Qld. l.c.—The Birds of Charleville. Kendal Broadbent (p. 23). Nest and Eggs of *Xenorhynchus Australis*. W. T. White (p. 136).

Proc. Inst. N.Z. l.c.—On a deformation of the bill of *Heteralocha acutirostris* (♀) an endemic sp., in which the bill normally presents very remarkable differences according to sex; with observations upon the habits of the bird. W. Colenso, F.R.S. (p. 140). On the Ornithology of Hauturu Island, &c. A. Reischek, F.L.S. (p. 181, 184, 188). On Moa remains from Great Barrier Island. Sidney Weetman (p. 193).

#### REPTILES.

Mr. H. J. M'Cooey gives his observations of the method by which *Chelodina longicollis* excavates the burrows in which she will lay her eggs (p. 107). Mr. Macleay describes *Hoplocephalus Carpenteria*, n.sp. from near Normanton.

C. W. de Vis, M.A., in a contribution to the Herpetology of Queensland (p. 811), describes n.sp. of *Edura*, *Grammatophora*, *Varanus* (?), *Egernia*, *Tiliqua*, *Hinulia*, *Mocoo*, *Heteropus*, *Anomalopus*, *Ophioscincus*, *Ablepharus*, *Delma*.

Proc. Inst. N.Z. l.c.—On the occurrence of *Zootoca vivipara*, an English sp., introduced no doubt in plant cases. T. W. Kirk (p. 67). On the embryology of *Nautilinus* sp. a viviparous lizard of N.Z. W. Colenso, F.R.S., (p. 147).

On *Nephruirus platyurus*, n.sp. G. A. Boulenger, Ann. and Mag. XVIII. (p. 91).

#### ICHTHYOLOGY.

Dr. Ramsay and Mr. Douglas Ogilby define the generic characters of *Perca* (introduced) *Percalates*, n.g., *Lates*, *Psammo-perca*, *Ctenolates*, and (incl. *Murrayia* and *Riverina*) *Macquaria* (p. 184), and describe n.sp. of *Dules* (p. 4). *Carcharias* (p. 163). *Chærops*, *Labrichthys* (p. 242). *Opisthognathus*, *Trichiurus*, *Neopenpheris* (p. 559). *Eupetrichthys* n.g. *angustipes* (p. 632). *Tripterygium annulatum* and *Congromuræna longicauda* (p. 1021).

Proc. Roy. Soc. Tasm. l.c.—On the genus *Latris*, and description of *Clinus Johnstoni*, n.sp., W. Saville Kent, F.L.S. (p. 117).

Proc. Roy. Soc. Qld. l.c.—On the occurrence of *Chanos salmoneus* in Moreton Bay. D. O'Connor (p. 141).

On *Polyprion prognathus* (Hapuku of N.Z.) Dr. A. Günther, Ann. and Mag. XX. 236, and on the Australian sp. of *Beryx*, ib. 240

*Girella cyanea*, Maccl., is redescribed; and *Prionurus maculatus*, n. sp. described by Mr. Douglas-Ogilby. Proc. Zoolog. Soc. (pp. 393-395).

#### MOLLUSCA.

Contributions to Conchology, No. 1. By James C. Cox, M.D., F.L.S. (p. 1061).

Proc. R. S. Tasm. l.c.—On the Australian *Pectens* confounded with the N.Z. *P. laticostatus*. Professor Tate (p. 113). Review of the Tasmanian Trochidæ and some other species of molluscs (p. 193). J. Brazier, F.L.S.

Proc. Roy. Soc. S.A. l.c.—Description of some n.sp. of S.A. Marine and Freshwater Mollusca (p. 62), and Revision of the recent Lamellibranch and Palliobranch Mollusca of S. Australia (p. 76). By Professor Tate. Trochidae and other genera of S.A. J. Brazier, F.L.S. (p. 116).

Proc. Inst. N.Z. l.c.—On *Architeuthis Kirkii* n.sp., a gigantic Cuttle-fish 28ft. 10in. long. C. W. Robson (p. 155). The anatomy of *Patinella radians*. J. A. Newell, B.A. (p. 157). The Mollusca of the vicinity of Auckland. T. F. Cheeseman, F.L.S. (p. 161). Land Mollusca of the Thames Gold Fields. J. Adams, B.A. (p. 177).

Land Shells from N.G. and Solomon Islands. Ann. and Mag. XIX. 416. *Voluta Güntheri* n.sp. from W. Australia, Journ. Conchol. V. 62. By Edgar Smith. (*V. Güntheri* is figured for the first time, Thes. Conch. V. Pl. 17.)

On Australian sp. of *Physa* and *Limnæa*, A. H. Cooke, F.L.S., Journal of Conchology, vol. V.

List of Gastropoda Lamellibranchiata and Brachiopoda from Port Phillip Heads. J. Bracebridge Wilsen, Victorian Naturalist, vol. IV., No. 8.

*Conus* and *Voluta*, various species. G. B. Sowerby, F.L.S., Thes. Conchyl. V., part 44.

On the genus *Vulsella*, A. H. Cooke M.A. Ann. and Mag. XVII, 1886 (p. 59). *Lamellaria Wilsoni*, n.sp. E. A. Smith ib. XVIII (p. 270).

#### CRUSTACEA.

On the Inter-Coxal Lobe of certain Crayfishes. By W. J. Mackay, B.Sc. (p. 967.)

Proc. Inst. N.Z. l.c.—On a new sp. of *Alpheus*. T. W. Kirk (p. 194). On *Palinurus Lalandii* and *P. Edwardsii*. Professor T. Jeffrey Parker (p. 150).

Proc. R. S. Tasin. l.c.—Note on *Palinurus Hügelii* from the Schouten Islands. The sp. probably extends also to N.Z. being, it is thought, identical with *P. tumidus*. W. Saville Kent, F.L.S. (p. 116). Fossil Crabs from P. Pliocene beds of the Yarra Estuary. F. S. Wintle, F.L.S.

#### ENTOMOLOGY.

Mr. Masters completes (Part VII.) his Catalogue of the Described Coleoptera of Australia, amounting to 7201 species (p. 31).

Mr. Macleay (Miscellanea Entomologica, No. III-V.) revises the Scaritidæ of New Holland (p. 115) describes 95 new species of Coleoptera from Cairns district, N. Queensland (pp. 213, 307), revises the Helæides, a remarkable Australian group of the Tenebrionidæ (pp. 511, 634), gives a sketch of the Entomology, etc., of King's Sound, N.W.A. Note on Scaritidæ from the Dawson R. (p. 972). Mr. Olliff describes *Ithaca anthina*, n.g. n.sp. of Œdemeridæ (p. 153), continues his revision of the Australian Staphylinidæ (p. 471), and describes *Xenica*, n.sp. (p. 976).

Mr. E. Meyrick, F.E.S., contributes (1) descriptions of new Australian Rhopalocera (p. 827) and (2) revision of the Geometridæ, with a supplement principally of W. Australian forms (p. 835), (3) descriptions of Australian Microlepidoptera Pt. XIV. (Ecophoridæ continued) (p. 929).

On a new *Pielus* from the Blue Mountains. By A. Sidney Olliff and Henry Prince (p. 1015).

Proc. R. S. Vict. l.c.—On the sound organs of *Cyclochila Australasiæ* (Green Cicada) by A. H. S. Lucas, M.A. (p. 173).

On the Trogidæ of S.A. J. G. O. Tepper, F.L.S. (p. 12) on *Ogyris Amaryllis* (p. 13) on a supposed n.sp. of Phasmidæ (p. 112); and a classified list of the Geometrina found round Balhannah, with notes on species. E. Guest (p. 126).

Inst. N.Z. l.c.—Monograph of N.Z. Noctuina, 17 genera, 6 represented by single wide ranging species, 5 endemic, with only 6 sp., 6 almost cosmopolitan.  $\frac{7}{9}$  of the endemic sp. belong to *Leucania* and *Mamestra*, just as among the Geometrina, *Larentia*



and *Notorea* predominate. Both apparently of Chilian origin E. Meyrick, F.L.S. (p. 3). On Coccidæ, their Honeydew and the Fungus which accompanies them. W. M. Maskell, F.R.M.S., (pp. 41, 45) N.Z. 'Glowworms' the Larvæ of Gnats, and by no means coleopterous. G. V. Hudson (p. 62). On *Junonia vellida* and *Deiopeia pulchella* in N.Z. The same (p. 201). On *Ixodes Mantellii*, a parasite on *Diomedea exulans*. T. W. Kirk (p. 65). On *Pasiphila lichenodes*, n.sp. A. Purdie, M.A. (p. 69). Descriptions n.sp. of spiders. A. T. Urquhart (p. 72). P. Goyen (p. 201). On a n.sp. of *Hemideina*, an Orthopterous insect W. Colenso, F.R.S. (p. 145).

The Transactions of the Entomological Society of London, 1886, contain the following articles of Australian interest :—A classification of the Pterophoridae. E. Meyrick, F.E.S. (p. 1), and Lepidoptera of South Pacific (p. 189). Descriptions of new genera and species of Lepidoptera heterocera from the Australian Region. A. G. Butler, F.L.S. (p. 381). The vol. for 1887 also contains papers on Pyralidina from Australia and South Pacific (p. 185), and on some exotic (Australian) Microlepidoptera. E. Meyrick, F.E.S. By the same—Notes on synonymy of Australian Lepidoptera described by Mr. Rosenstock. Ann. and Mag. XVII., 1886 (p. 528). New sp. of moths from Solomon Islands. A. G. Butler, F.L.S. ib. XIX. 432. *Ornithoptera Victorix* ♂. H. G. Smith, ib. 445. Heterocerous Lepidoptera from Solomon Islands. A. G. Butler, ib. XX. 114, 240.

#### VERMES.

Mr. Fletcher reports on the acclimatisation of a Land Planarian (*Bipalium Kewense*) in the neighbourhood of Sydney (p. 244) contributes notes on Australian Earthworms (pts. iii and iv) with description of 16 new species (pp. 375, 601); a note on the discovery of *Peripatus* in Gippsland (p. 450); and in conjunction with Mr. A. G. Hamilton commences a series of notes on Australian Land Planarians with descriptions of 18 sp. of *Geoplana* and *Rhynchodemus*.

Dr. Haswell has a note on the Embryology of *Vermilia caespitosa* and *Eupomatus elegans* (p. 1032).

On *Bipalium Kewense* at the Cape. By R. Trimen, F.R.S. Proc. Zool. Soc. Lond., 1887 (p. 548).

On the genus *Temnocephala*, an aberrant Monogenetic Trematode. By Dr. W. A. Haswell, Sydney University, Q.J.M.S., Vol. XXVIII., p. 279 (4 sp. described).

Proc. Inst. N.Z. I.C.—On a specimen of *Acanthodrilus* sp. in which the posterior portion is double, the anal aperture being situated in the fork, T. W. Kirk (p. 64). On the work of Earthworms in N.Z. showing how rapidly they bury the surface under their accumulated castings. A. T. Urquhart (p. 119). Earthworms of N.Z. their habits, &c. W. W. Smith (p. 123).

Further contributions to the Anatomy of Earthworms, No. IV., by F. E. Beddard, F.R.S.E., with desc. of *Cryptodrilus Fletcheri*, n.sp., from Qld. Proc. Zool. Soc. Lond., 1887 (p. 544).

#### ECHINODERMATA.

Note on *Echinaster decanus*, Müll and Trosch. By Professor F. Jeffrey Bell, M.A., Corr. Mem. Soc. N.S.W. (p. 1074).

#### HYDROIDA.

Roy. Soc. Vict. I.C.—Review of the Plumulariidae, with obs. on various Australian Hydroids, and corrections of, and additions to, v. Lendenfeld's papers on the Hydromedusæ, L.S. N.S.W. Vols. IX and X. By W. M. Bale F.R.M.S. (p. 73).

The Australian Museum has published a "Descriptive Catalogue of the Medusæ of the Australian Seas." Pt. I. Scyphomedusæ. Pt. II. Hydromedusæ, by R. v. Lendenfeld.

#### PORIFERA.

Sponges from the neighbourhood of Port Phillip Heads. H. J. Carter, F.R.S. Ann. and Mag. XVII. 1886 (pp. 40, 112, 431, 502) XVIII. (p. 34, 126, 271, 369, 445). On *Chondrosia spurca* n.sp. same locality, ib. XIX. (p. 286.)

## POLYZOA.

Nine species of Polyzoa, previously referred to several genera (*Lunulites* &c.) have been united by Mr. Whitelegge under *Bipora*, n.g. (p. 337.)

Roy. Soc. Vict. l.c.—P. H. Macgillivray, M.A., &c. describes a large number of sp. of Polyzoa (pp. 34, 64, 180) and publishes a Catalogue of the Marine Polyzoa of Victoria, with bibliography, &c. (p. 187).

Australian Bryozoa. A. W. Waters, Ann. Mag. XX. 81, 181, 253. *Lophopus Lendenfeldi* n.sp. from Parramatta R. By S. O. Ridley, F.L.S. Journ. Linn Soc. Z. XX. 61.

## INFUSORIA.

Proc. Inst. N.Z. l.c.—On Freshwater Infusoria of Wellington district. W. M. Maskell, F.R.M.S. (p. 49).

New Infusoria from N.Z. T. W. Kirk, Ann. and Mag. XIX. 439.

## GENERAL.

Report on a small Zoological Collection from Norfolk Island. *Introductory Remarks*, by J. A. Millington; *Reptiles and Fishes*, by J. Douglas Ogilby; *Molluscs*, by John Brazier; *Insects*, by A. Sidney Olliff (p. 989).

## BOTANY.

Dr. Woolls gives a sketch of the Flora of Mount Wilson (p. 6). Mr. Haviland continues his list of Flowering Seasons of Australian Plants (pp. 105, 135, 185, 348, 565). Baron v. Mueller describes n.sp. of *Jacksonia* from N.S.W., and enlarges his Census N.S.W. (p. 191), describes n.sp. of *Mussanda* and *Begonia* from N. G., with a list of other plants lately added to the Flora of that country (p. 419). Dr Katz continues his Bacteriological examination of the Sydney Water Supply (pp. 151, 329), describes an improved method of cultivation (p. 187), his researches into

Typhoid and Leprosy at Little Bay Hospital (p. 203), Phosphorescent Bacteria from Seawater (pp. 331, 626), discusses the practice of Protective Inoculation for Bovine Pleuropneumonia (p. 423), and gives an account of his investigations into the Horse Murrain which broke out near the Barrier Ranges a year ago (p. 565). Mr. Maiden describes specimens of indigenous Sago and Tobacco from N. G. (p. 457). Mr. A. G. Hamilton gives a list of the indigenous Plants of the Mudgee District, their habitats and time of flowering, with numerical notes ingeniously indicating the geographical distribution of each species in the briefest possible manner; and in particular compares the Mudgee with the Sydney Flora. Dr. Haswell in his Jottings from the Biological Laboratory of Sydney University gives some notes on *Tmesipteris* and *Psilotum* (p. 1025); and we have a List of Hepaticæ collected by Mr. T. Whitelegge in New South Wales, 1884-85. By B. Carrington, M.D., F.R.S.E., and W. H. Pearson.

I also note in Vol. XX. Proc. Roy. Soc. N.S.W. from Baron v. Mueller, a description of *Ardisia poranthera*, n.sp. from N. G. (p. 43), and further additions to the Census of indigenous Plants (p. 75). From Dr. Bancroft, a note on the poisonous properties of *Daphnandra repandula*, *Archidendron Vaillantii*, *Pongamia glabra*, *Zanthoxylum veneficum*, all from the Johnstone River, N. Queensland (p. 69), and Professor Rennie describes his analysis of the sweet principle of *Smilax glyciophylla* (p. 211). In Vol. XXI. Mr. Maiden investigates the Tanning properties of a large number of sp. of *Acacia*, *Eucryphia*, *Eucalyptus*, *Angophora* and *Fusanus* (pp. 27, 82), and the Rev. H. Collie, the influence of Bush Fires in the distribution of species.

Proc. Roy. Soc. Tasm. l.c.—On *Peronospora infestans* (p. 27), and Tasmanian Mosses, being a complete description of all known species, including 43 not recorded in Fl. Tasm., together with an illustrated Key to the genera R. A. Bastow, F.L.S. (p. 38). Case of poisoning by *Rhus radicans*. F. Abbott, Supt. Bot. Gard. (p. 182). On *Eucalyptus Muelleri*, n.sp. (or more properly, acc. Baron v. Mueller), a var. of *E. urnigera*). T. B. Moore (p. 207).

Proc. Roy. Soc. Vict. l.c., also contain a record of plants from N.W. Australia by Baron von Müller, with descriptions of n.sp. of *Dodonaea*, *Gomphrena*, *Swainsona*, *Cyperus* (p. 49). On the Fungi growing in mines, by H. T. Tisdal F.L.S. (Vol. XXIV. pp. 41, 46). The Presidential Address also contains a report by Baron von Müller on Botanical progress in Australia.

Proc. Roy. Soc. S.A. l.c.—Additions to the Extra-Tropical Flora of S. Australia (p. 57). Description of *Corchorus Elderi* n.sp. from Central Australia (p. 58) and list of plants from the Mulligan River (p. 213). By Baron v. Müller. On *Caladenia cardiochila* n.sp. Professor Tate (p. 60). Additions to the Flora of Kangaroo Island (p. 114) and Additional Lichens and Fungi of S.A. (p. 215). By J. G. O. Tepper F.L.S.

Proc. Roy. Soc. Qld. l.c.—On the decadence of Australian Forests. A. Norton, M.L.A. Note on *Caryota urens*. L. A. Bernays, F.L.S. (p. 33).

The Proceedings of the N.Z. Institute Vol. XIX. contain description of n.sp. of a large number of N.Z. genera, phænogamic and cryptogamic, by J. Buchanan, F.L.S. (p. 215), W. Colenso, F.R.S. (pp. 259, 271, 301), D. Petrie F.L.S. (p. 323, 325); A Review of the N.Z. sp. of *Coprosma*. T. F. Cheeseman, F.L.S. (p. 218). An account of the Tree Ferns of New Zealand. W. Colenso, F.R.S. (p. 252). J. Buchanan, F.L.S. (p. 217). On the Leafglands of *Myoporum laetum*. Cath. Alexander B.A. (p. 314). On the development of flower of *Coriaria ruscifolia*. T. W. Rowe, M.A. (p. 317). Medicinal properties of some N.Z. plants. J. Baber, C.E. (p. 319).

Baron v. Müller also describes (in the Victorian Naturalist vol. III.) Papuan and Polynesian Sterculiaceæ (pp. 45, 63), *Helicia Forbesiana*, n.sp. from N.G. (p. 63). *Trematanthera Dufaurii* n.sp. from N.G. (p. 71). *Adiantum diaphanum* n.sp. Victoria (p. 73). *Kochia spongicarpa*, n.sp., *K. lobostoma* n.sp., *Helicia Sayeriana*, n.sp. (p. 92). *Elachanthera Sewellice*, n.sp. (p. 108) *Kayea Larnachiana*, n.sp. *Hydrocotyle comocarpa*, n.sp. (p. 126).

*Sida Kingii*, n.sp. *Goodenia Stephensoni* (p. 138), n.sp. *Rhododendron Lochae*, *Agapctes Meiniana*, n.sp. *Didymocarpus Kinnearii*, n.sp. from Mt. Bellenden Ker (p. 157). *Hypsophila Halleyana*, n.sp. from the same locality (p. 168). List of plants from Mt. Bellenden Ker (p. 169). List of Australian lichens, ib. Vol. IV. (p. 88). *Rhododendron Carringtoniae*, n.sp. (N.G.) (p. 110). *Araucaria Cunninghami* in N.G. (p. 121). Dr. Woolls also contributes a note on Medicinal plants of N.S.W. ib. (p. 103).

During the last year Baron F. von. Müller has published a key to the Flora of Victoria, and eight decades of his promised work on the genus *Acacia*. This is entitled "*Iconography of Australian species of Acacia and Cognate Genera, &c.*" In these decades he has given figures of 80 species hitherto but imperfectly known, or only partially described. He remarks in his preface that the genus contains 300 species of well marked forms, and that it is his object to devote the volume to those native species "of which hitherto no drawings had appeared anywhere." The material for the work has been accumulating for nearly 40 years, partly from his own travels and researches, and partly through contributions from amateur botanists. No plant has been omitted of which the author does not possess full material for detailed analysis. It is needless to observe that this work is one of the greatest value, because the genus *Acacia* not only is the largest and one of the most characteristic of Australian genera, but also contains many species highly useful for economical, medicinal or ornamental purposes.

## PALÆONTOLOGY AND GEOLOGY AND MINERALOGY.

Trilobites are the subject of three papers, by M. F. Ratte (p. 95), Professor Hutton (p. 257). Mr. J. Mitchell (p. 435). M. Ratte further writes on Australian fossils of *Salisburia* (pp. 137, 159) on the muscular impression of *Notomya* (p. 139), and on a remarkable example of Conchoidal Fracture in Torbanite. I have added a second note on *Platyceps Wilkinsonii* with description of two other specimens of probably the same Labyrinthodont



from the same locality near Gosford. With them were found a vast number of Ganoid fishes in an excellent state of preservation, forming the most important discovery as yet recorded from the Hawkesbury beds (p. 156). A description of the Volcano of Taal, Luzon, with Bibliographical, Geographical, Geological, Botanical, and Zoological notes. Rev. J. E. Tenison-Woods (p. 685).

Note on a Leucite-basalt from Central New South Wales. By Rev. J. Milne Curran, F.G.S. (p. 974).

On a supposed new species of *Nototherium*. By C. W. De Vis, M.A. (p. 1065).

Proc. Roy. Soc. N.S.W. l.c.—Papers by Prof. Liversidge. On the composition of the Thunda meteorite (p. 73). On some Rocks and Minerals from N.G. (p. 227). On Minerals—chiefly Silver—from N.S.W. (p. 231), and on the composition of Drift Pumice, of Sydney, and the various Lavas from the Pacific (p. 235).

Tin deposits of N.S.W. by S. H. Cox, F.C.S., &c., with a sketch of the Bibliography of Tin Mining in N.S.W. (p. 93). A paper mainly upon Lake George, by F. B. Gipps, C.E. (p. 143), may be also mentioned here.

Proc. Roy. Soc. Vict. l.c.—Intrusive Rocks at Dargo. A. Howitt, F.G.S. (p. 127). Post Tertiary Strata between Glenelg R. and Portland Bay. John Dennant, F.G.S. (p. 225). On the formation of the Yarra Delta. A. H. Lucas, M.A. (p. 165). Tripoli (Randanite) deposits of Lilicur. F. M. Krause, F.G.S. (p. 250). Geology of Portland Promontory. G. S. Griffiths, F.G.S. (Vol. XXIV. p. 61).

Proc. Roy. Soc. Tasm. l.c.—Professor Hutton writes on the Geology of the N.Z. Alps (p. 1). R. M. Johnston, F.L.S., contributes a large number of important papers upon questions of Tasmanian and Australian Geology, viz.:—Palæontology, with descriptions of fossils of Upper Palæozoic Rocks of Tasmania (p. 4). Geology of Bruny Island (p. 18). Reference list of the Tertiary fossils (382 sp.) of Tasmania

(p. 124). Coal Seam at Compton Old Beach (p. 155). Longford Coal Basin (p. 156). List (with descriptions of n.sp.) of plants occurring at Lord's Hill, Newtown, containing many new and important forms, introducing a discussion upon the Homotaxial and Heterotaxial relations between European, Australasian and other formations, and illustrating by a diagram the reciprocal transmigration of organisms, which has led (and leads) to the puzzling variety of association in which they are combined in various regions and in various eras (p. 160). Geology of King R. &c. (p. 210). Upper Palæozoic Crinoidea of Tasmania (p. 231).

Proc. Roy. Soc. S.A. l.c.—Geology of Southern and Western parts of the Lake Eyre basin, with a list of fossils (Mesozoic) Gavin Scouler (p. 39). The Lamellibranchs (p. 142), Scaphopods (p. 190) and Pteropods (p. 191) of the Older Tertiary of Australia. By Professor Tate.

Proc. Roy. Soc. Qld. l.c.—On *Prochærus celer*, an Australian P. Pliocene Artiodactyl, allied to *Dicotyles* (p. 42), and on a femur of (probably) *Thylacoleo* (p. 122.) C. W. de Vis, M.A. On the minerals of Kilkivan, Wide Bay. W. Fryar, Govt. Inspector of Mines (p. 129).

Proc. Inst. N.Z. l.c.—On a n.sp. of *Scaphites* from the Cretaceous of Wainui Stream, Patangata county (p. 387). A notice of a paper by von Ettingshausen on the fossil flora of the Canterbury Mountains, to appear in the Transactions K. Akad. d. W. Wien. by the late Sir Julius Haast (p. 449). (This paper forms part of the argument as to the relative ages of the Mt. Potts and Clent Hill beds, to which I referred in my address to this Society for the year 1885.) The Hot Springs of Great Barrier Island (p. 388). Professor Hutton has papers on the Geology of the Trelissick Basin (p. 392). The Gabbro of Dun Mountain (p. 412). Geology of N.E. Otago (p. 415). On the Waihao Valley (p. 430). The Waihao green-sands are also investigated by A. Mackay, Assistant Geol. (p. 434). H. Hill, B.A., (p. 441) continues the discussion as to the Geological age of the Scinde Island, to which I referred in my last address (p. 1223). A. W. Hamilton, (p. 452) in Notes on

the Geology of the Bluff district, shows that Bluff Harbour was at no remote period a fresh water lake (occupying, I suppose, a Fiord excavated by ice at a far more distant time). John Goodall, M. Inst. C.E., shows (p. 455) that the formation of the Timaru Downs, which was regarded by Haast as Loess, or Wind and Rain Formation, and by Hutton to a Marine origin, is in reality of Volcanic, consisting of stratified deposits of volcanic cinder, ash, and mud upon a substratum of basalt or lava, which is presumed to have flowed from the same or neighbouring vents. On the Tasmanian and Australian species of *Stenopora*. Professor H. A. Nicholson, Ann. and Mag. XVI. 1886 (p. 173). Baron v. Ettingshausen publishes in the Geological Magazine Aug., 1887 (p. 359), an account of the Tertiary Flora of Australia, drawn from Mr. Wilkinson's collections from New England. This paper is an abstract of contributions to the Tertiary Flora of Australia (Parts I. and II.). Denkschriften K. Akad. d. W. Wien. Also ib. (p. 363) a sketch of the N.Z. Tertiary Flora, being an abstract of the paper to which reference has been already made. Proc. Inst. N.Z. l.c.

The Department of Mines, Sydney, has recently issued a Report on the Geology of the Vegetable Creek Tin Mining Field, New England District, with Maps and Sections, by T. W. Edgeworth David, B.A., F.G.S., Geological Surveyor.

#### THE DISTURBANCES AT TARAWERA, N.Z.

These extraordinary phenomena have naturally given origin to a large number of papers which argue mainly on two different if not opposite hypotheses. The one regards the earthquakes and eruptions as no more than a sudden increase and culmination of the activities previously familiarly known in the district, referring the catastrophe to a larger admittance of water to regions of intensely high, but not rising temperature, at no great depth below the surface. Those who maintain this view, which has been called the Geyser theory by Mr. Griffiths, speak with so

much authority that it must be listened to with respectful attention. I cannot however bring myself to accept it as a sufficient explanation. The other hypothesis is that of volcanic origin, implying increased heat of deep seated rocks, increased fluidity of their semi-solid magmas, upward movement of lava along faults or lines of least resistance, dislocation of the upper and more solid masses, and steam explosions of the usual type, but not attended by subsequent outpouring of lava. This is hardly the time to attempt a discussion of the question; and I therefore simply subjoin a list of the principal reports and essays, including some which have but an indirect bearing on Tarawera, but which seem to belong as a sort of context to this theme.

Proc. N.Z. Inst. Vol. XIX.—Ascent of Ruapehu. J. Park, Geol. Surv. Dep. (p. 327). Thermal activity in R. Crater. L. Cussen (p. 374). Causes of Volcanic action. W. L. Travers (p. 331). J. Hardecastle (p. 338). Eruption of Mt. Tarawera. J. A. Pond and S. P. Smith, F.R.G.S. (p. 342). Major W. G. Mair (p. 372). Archdeacon Williams (p. 380). E. P. Dumerque (p. 382). Sir James Hector, Presidential Address (p. 462). On traces of former Volcanic Dust Showers about Napier. H. Hill, B.A. (p. 385).

Proc. Roy. Soc. Vict. Vol. XXIII.—On the official reports of the Tarawera Outbreak, with objections to some of the conclusions drawn by Hector. G. S. Griffiths (p. 117).

Proc. Linn. Soc. N.S.W.—Notes on the recent eruptions in the Taupo Zone, N.Z., by myself in our Proceedings, series 2, Vol. 1. (pp. 516, 1217).

J. Martin, F.G.S., writes on the Terraces of Rotomahana, Q.J.G.S. (Vol. XLIII. p. 165). Captain Hutton, F.G.S. On the Eruption of Mount Tarawera (ib. p. 175).

In his Presidential Address Sir J. Hector gives a brief notice of a series of soundings taken in the South Pacific by Capt. Barber, of the U.S.A. Exploring ship *Enterprise*, which tend to confirm Professor Hutton's views (in opposition to those of Wallace) as to the existence of a submarine plateau indicative of a former land communication between S. America and New Zealand.

The principal portion of the Address however, is devoted to a full account of the Tarawera eruptions, a subject so large that I have as above collected a number of different essays at its treatment under a separate head.

#### GLACIAL PERIODS IN THE SOUTH TEMPERATE ZONE.

The questions involved under this heading are now rising into such prominence that the papers dealing with them may properly like the foregoing be collected in a separate parcel. The file may commence (since we have neither space nor time for a complete bibliography) with—The Memorandum on the Correlation of the Indian and Australian Coal bearing Beds, by R. Oldham, *Geol. Mag.* On the occurrence of Glacial conditions in the Palæozoic Era, and on the Geological Age of the Beds containing Plants of Mesozoic type in India and Australia. By W. T. T. Blanford, *F.R.S. (Q.J.G.S. XLII. 249)*. *Records Geolog. Sur. Ind. Vol. XIX. (p. 11)* Waagen and Oldham.

On evidence of Glacial Action in the Carboniferous and Hawkesbury series, N.S.W. By Mr. T. W. E. David, *F.G.S. (Q.J.G.S. XLIII. 190)*.

Evidences of a Glacial Epoch from Kerguelen's Land, drawn from the Challenger's reports. By G. S. Griffiths, *F.R.S. (Proc. Roy. Soc. Vic. XXIII. p. 45)*.

On Glaciated Pebbles and Boulders in the so-called Mesozoic Conglomerates of Victoria, by E. J. Dunn, *F.G.S. (ib. XXIV. p. 44)*.

In *Proc. L.S. N.S.W., VII., p. 598*, an account is given by myself of the conglomerate of the Upper Marine Beds at Wallerawang and Capertee. *Ib. Vol. X., 44*, is a paper on the Glacial Period in Australia, *R. v. Lendenfeld, Ph.D.* *Ib. p. 334*, and On the supposed Glacial Period in Australia, by Captain Hutton, *F.G.S. (in which reference is made to N.Z. Journal of Science, Vol. II., p. 266, and Q.J.G.S., XLI., p. 213.)* C. W. Wilkinson, *F.G.S., in Pres. Add., 1884 (p. 1230)*, refers to the same question. A paper by Robert M. Johnston, *F.L.S., Roy. Soc., Tasmania, 1886 (p. 23)*. By Gavin Scouler, on a glacial period in

Australia, and Professor Tate in rejoinder, in the Proc. Roy. Soc. S.A. Vol. VIII. All other papers bearing upon the Upper Palæozoic and Mesozoic rocks of the Southern Hemisphere may be regarded as portions of the evidence before us.

#### EXPLORATION OF MT. SEAVIEW.

The successful ascent of Mount Bellenden Ker, in North Queensland, by Messrs. Sayer and Froggatt, and the discovery of Himalayan forms of vegetation, such as rhododendron and cranberry, have suggested to the eager mind of Baron von Müller the much less difficult exploration of Mount Seaview, near the head of the Hastings River. It is quite possible or probable that some outliers of a Southern extension of this Asiatic Mountain Flora may reach even so far south as this somewhat isolated peak, connected perhaps in some way or other with the mountains of New Guinea and Borneo, which seem to have served as stages in the geographical progress of these Northern forms. We are informed through the kindness of Mr. Fosbery that the ascent of Mount Seaview may be attempted with good prospect of success by starting from Port Macquarie, about 60 miles distant, or from Walcha, about 80, by making arrangements with the mail contractors in either of these places.

It seems not improbable that the Macleay Range, between the Clarence and Macleay Basins, and Mount Lindsay at the western extremity of the Nandewar Range, may in like manner yield results of much interest and importance as bearing upon the geographical distribution of plants. There is indeed a large area of very high and difficult mountain country lying to the East of the Dividing Range, which is, so far as I can learn, very imperfectly known, and which deserves a close examination.

#### EMBRYOLOGY OF MONOTREMATA AND MARSUPIALIA.

We have received from Mr. W. H. Caldwell, who was so long and so indefatigably engaged in Monotreme hunting to the North, the first part of his Embryology of Monotremata and Marsupialia,



read before the Royal Society on the 17th of March last. In this, as is now pretty generally known through the medium of various scientific or quasi-scientific journals, he gives a history of previous theories and investigations and his own discoveries, which are summarized as follows—

In Monotremata and Marsupialia—

I.—There is a vitelline membrane which, appearing between the young ovum and follicular epithelium, persists until hatching in Monotremata, and until late uterine stages in Marsupialia.

II.—There is a second primary egg membrane secreted by the follicular epithelium shortly before the ovum leaves the ovarian follicle—the pro-albumen.

III.—The pro-albumen, by absorption of fluid in the Fallopian tube and uterus, becomes the albumen layer outside the vitelline membrane.

IV.—A secondary egg membrane—the shell membrane—is found in the Fallopian tubes, and becomes thicker in the uterus.

V.—The albumen soon disappears, and the vitelline membrane comes to lie next the shell.

VI.—The ovum absorbs fluid from the uterus, and increases in Monotremes from about 3 mm. to  $15 \times 13$  mm.

VII.—A layer, simulating the appearance of a membrane, inside the vitelline membrane is a coagulum formed by re-agents from the nutritive fluid passing into the ovum.

VIII.—There is a germinal disc, and the ovum undergoes a partial segmentation in Monotremes and *Phascolarctos*.

In Placentalia—

IX.—The vitelline membrane has generally been known as part of the zona pellucida.

X.—The pro-albumen is probably represented by the outer “granular layer” of the zona pellucida.

XI.—The shell membrane has not been represented in its early stages, except by Barry. The “villous chorion” (non-cellular, Bischoff) is probably partly derived from a true shell membrane.

Mr. Caldwell has not, so far as I am aware, as yet made public the results of his inquiries into the Embryology of *Ceratodus*.

#### ANTARCTIC EXPLORATION.

The question of Antarctic exploration has been well agitated both in the Northern Hemisphere and in these southern latitudes. The following papers will repay perusal :—

Proc. Inst. N.Z. XIX.—C. Traill (p. 470).

Roy. Soc. Vict. XXIII.—G. S. Griffiths (p. 264).

Ib. Progress Rept. of Ant. Expl. Com. (p. 275).

Roy. Soc. Tasm.—Chas. P. Sprent, Deputy Surveyor-General (p. 141.)

New South Wales, it may be surmised or hinted in an apologetic tone, is so taken up with her century's achievements, that she has for the present ceased to look forward into the future. We have certainly displayed a manifest lack of interest in an enterprise of such importance as this, a want of energy not often chargeable against a colony, which “*ab exiguis profecta initiis, eo creverit ut jam magnitudine laboret sua* ;” for she has occupied the whole of Australia with the settlements of her daughters or her nieces, and has even been credited with an affectation of assuming for her own greater glorification the surname of the Continent.

In the waste of public funds, which no Ministry seems able to control and which I do not refrain from stigmatizing as the greatest danger to the liberty and welfare of New South Wales, it is deplorable that no outlay should be even proposed for an object so great as that of Antarctic Exploration. One fiftieth part of the money wasted during the last year on such plausible but delusive purposes as rabbit extirpation, relief of the unemployed, and Centennial

(or Centenary) Celebrations would have secured to New South Wales an enduring renown worthy of the completion of her Century, more lasting than Statues of Bronze or Parliament Houses, or these other celebrations which leave no more stable a memorial than that famous spirit did which departed "with a strong smell of sulphur and a melodious twang." The British Government decline, and very properly decline, to take part in a Joint Stock Exploration. On the same grounds we New South Walesmen also should shrink from confederate action where the terms and conditions of the confederacy are informal and indefinite. Let Victoria by herself or South Australia by herself, or Tasmania or (more logically) let New South Wales assume the inception, the contrivance, and the prosecution of this enterprise, and the other young States which we call colonies may assist. But let us have no divided councils. Let the authority be One, and let the responsibility rest upon One. We know well enough how confidently the most unfit persons will compete for the direction of an exploring expedition or any other perilous business; we know also unhappily, how the least fit are quite as likely to be appointed to take charge of the health and lives of men, to say nothing of the possible results of exploration, as those are whose lives have been devoted to enterprises of the same kind; and we therefore also know that a Joint Exploration Committee, with its representatives from four or five different states, will go to pieces from the want of an absolute and definite command, a full and recognised responsibility. Whatever is badly planned and so breaks down, or whatever fails, whether from want of sufficient foresight, or because new and unexpected conditions, quite out of ordinary calculations, have intervened, cannot be entered against the account of any member of the committee. Or at best the least useful, the least energetic hangers on to the labour and luck of others, will escape censure in case of disaster, and will absorb all credit in the improbable event of success.

No, gentlemen, if an exploratory expedition into the Antarctic regions is to have any fair chance of success, it must start from one of these Southern States, and must be entirely under the control

and direction of the Government of that State. It would be a ridiculous affectation to pretend that such direction would be as a matter of course perfectly wise or perfectly impartial ; but it is the best for this purpose also, since it is the best that we can arrive at for the still more important concerns of our domestic legislation and administration.

It appears then to myself that it is of good omen that the Imperial Government should decline to associate itself with any of its Australian colonies in the matter of Antarctic Exploration ; since the same reasons which deter English Statesmen from acting with us are of equal weight in showing us that this is not, like other subjects, a matter for co-operation, but one that requires the undivided and unembarrassed efforts of a single Government. I would like to add that I cannot but regard it as a false move in the game to put forward hopes of any economic or commercial advantage to be immediately derived from such an expedition. Ultimately, no doubt, all geographical discovery does always increase the area of human industry. But it may be long before this advantage is appreciated, and longer still before it becomes a recognised fact. What we are concerned with is exploration and discovery. Others will be welcome to profit by our labours.

I have selected from an overwhelming mass of material the particulars which seem to be of primary interest to members of the Society, and have necessarily omitted much which well deserves our attention. But time presses, and faculties are limited. Thanking you for the attention with which you have received these very miscellaneous, and therefore, if for no other reason, fatiguing notes, I shall conclude with the expression of a sentiment in which all will join me.

FLOREAT SOCIETAS LINNEANA !

P.S.—Since the foregoing address was in print, I have received from Dr. Ramsay the following additional notes of papers upon Australian Natural History, viz. :—

## MAMMALS.

On the Wallaby commonly known as *Lagorchestes fasciatus*. By Oldfield Thomas, F.Z.S. In P.Z.S., 1886, p. 544.

On *Phascologale virginie*, a rare Pouched Mouse from Northern Queensland. By Robert Collett, C.M.Z.S. In P.Z.S., 1886, p. 548.

Note on a Point in the Structure of *Myrmecobius*. By Frank E. Beddard, M.A., F.Z.S. In P.Z.S., 1887, part III., p. 527.

Prof. J. H. Scott and Prof. T. J. Parker. Notice of a Memoir on a Whale of the genus *Ziphius*, recently obtained near Dunedin, New Zealand. In P.Z.S., 1887, part II., p. 342.

## BIRDS.

A List of the Birds collected by Mr. C. M. Woodford in the Solomon Archipelago. By W. R. Ogilvie-Grant; in which a new species of Crow, *Macrocorax Woodfordi* is described. P.Z.S., 1887, part II., p. 328.

A List of the Birds of Maria Island. By W. V. Legge, R.A., F.R.S., &c.

## REPTILIA.

Herpetology of the Solomon Islands. By G. A. Boulenger, F.Z.S., in which *Lepidodactylus Woodfordi*, *Lygosoma Solomonis*, *L. Woodfordi*, *L. concinnum*, *Typhlops Aluensis*, are described as new species. Of Batrachia, *Batrachylodes vertebralis* (gen. and sp.n.) and *Hyla lutea*, sp.n. In P.Z.S., 1887, part II., p. 333.

## FISHES.

Notes on *Carcharodon Rondeletii*. By Prof. T. Jeffrey Parker, B.Sc., C.M.Z.S. In P.Z.S., 1887, part 1, p. 27.

On the Skeleton and Affinities of the Paired Fins of *Ceratodus*. By G. B. Howes, F.Z.S., F.L.S., &c. In P.Z.S., 1887, part 1, p. 3.

On the motion of Mr. Deane, M.A., seconded by Mr. J. H. Maiden, F.R.G.S., a vote of thanks was accorded to the President for his Address.

In the absence of the Hon. Treasurer, his report on the financial condition of the Society was postponed.

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The following gentlemen were elected

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